

ART. XI.—*Descriptions of new species of Fungi collected by the U. S. Exploring Expedition under C. Wilkes, U. S. N., Commander; by Rev. M. J. BERKELEY and Rev. M. A. CURTIS.*

AGARICUS (Pleuropus) LAGOTIS, Berk. and Curt.;—pileo sessili elongato-conchiformi, antice latiori; strato superiore gelatinoso setoso-velutino; lamellis subconfertis.—Ad lignum. Oahu, Sandwich Islands.

Cap $1\frac{1}{2}$ in. long, sessile, narrowed behind, broad in front, the upper surface clothed with dense short soft bristles, at length naked in front. Gills moderately close, tawny when dry, edge entire. Spores white, round-oval.

Allied to *A. atropurpureus*, but differing in the coarse velvety coat which resembles that of *Exidia hispidula*, Berk. It also bears a strong resemblance to *Lentinus pelliculosus*, but the hairs are not fasciculate as in that species, nor are the gills toothed, not to mention the generic difference.

A. (Flammula) CRÆSUS, Berk. and Curt.;—aureus; pileo carnosio excentrico pilis innatis subtiliter squamoso; stipite brevi obeso; lamellis postice emarginatis confertis; sporis minoribus ellipticis.—Ad lignum (pineum?) Waha-rua Bay, New Zealand.

Cap 3 in. broad, sprinkled with obscure appressed pilose scales; stem 7 lines long, 4 thick, paler than the pileus, furfuraceo-tomentose; gills broad, strongly emarginate or sinuated behind, scarcely adnate, of a uniform golden yellow, not spotted.—Closely allied to *A. aureus*, but differing in its short excentric ringless stem and far smaller spores.

LENTINUS WILKESII, Berk. and Curt.;—tener; pileo profunde infundibuliformi subtiliter tomentoso lineato; stipite subæquali sursum furfuraceo deorsum nigro; lamellis confertissimis tenerrimis spiculiferis.—Ad lignum. Feejee Islands.

About 1 in. broad, white, finely streaked, margin slightly incurved; stem $1\frac{1}{4}$ in. long, scarce 1 line thick, black below, pale and furfuraceous above; gills extremely delicate and close, the edge very finely notched.—Closely resembling *L. pergameneus*, Lev., but more infundibuliform and with much more crowded gills.

POLYPORUS BRUNNEOLUS, Berk., in Lond. Journ. Bot., III, 187;—var. opacus; pileo renato-flabelliformi antice lobato tenui crebri-zonato sulcato opaco subtiliter tomentoso postice hic illic fucato glabro, pallide brunneolo zonis obscurioribus; stipite brevissimo disciformi; hymenio albido; poris minutis punctiformibus, acie integra obtusa.—Ad corticem arboris.—Samoan Group.

There is but a single specimen of this in the collection, which agrees pretty well with one of the original specimens from the Philippine Isles.

P. LITURARIUS, Berk. and Curt. ;—carnosus tenuis ; pileo flabeliformi glabro lineolato ; stipite brevissimo cum pileo postice attenuato confluyente ; poris minutis angulatis, dissepimentis tenuissimis denticulatis.—Ad lignum. Feejee Islands.

Cap $1\frac{1}{2}$ in. broad, $1\frac{1}{4}$ long, slightly lobed, reddish brown, marked with fine radiating lines, slightly depressed behind where it is confluent with the extremely short though strictly defined stem ; edge slightly incurved ; hymenium probably white.—A very distinct species to which we cannot point out any near ally. *P. Drummondii* is perhaps the nearest. It also resembles *P. sector*, but has no raised lines and is quite smooth.

FAVOLUS PLATYPORUS, Berk. and Curt. ;—pileo reniformi sublobato rigidiusculo glabro e contextu supra dissepimenta contracto reticulato ; poris amplis oblongis subhexagonis, dissepimentis emarginatis rigidis, acie subintegra.—Feejee Islands.

Cap $2\frac{1}{2}$ in. broad, $1\frac{1}{2}$ long, depressed behind, reticulated by the contraction of the substance above the dissepiments, edge very thin and acute. Stem extremely short, disciform. Dissepiments scooped out in the middle, pores 2 lines or more long, 1 line broad, but varying much in size.—Nearly allied to *F. alutaceus*, Mont. and Berk., but differing in its larger pores and reticulated surface. The pores are more rigid than in any other species with which we are acquainted except an undescribed species from Canada, which has not however the reticulated pileus. *F. intestinalis*, Berk., has pores as large, but is totally different in other respects.

THELEPHORA LAMELLATA, Berk. and Curt. ;—tota ochracea ; pileo infundibuliformi lobato rugoso-lamellato subtiliter tomentoso ; stipite elongato velutino-tomentoso ; hymenio sulcato rugoso glabro. Feejee Islands.

Pileus 2 in. broad, $1\frac{1}{4}$ deep, lobed, subplicate, clothed with permanent appressed down, coarsely lamellate rugose. Stem equal, cylindrical, $1\frac{1}{2}$ in. high, 2 lines thick, densely downy, almost velvety, solid. Hymenium rugose-plicate. The whole is of a beautiful ochre or tan color.

This species is rather larger than *T. caperata*, Berk. and Mont., is more strongly lamellate, has a very different kind of coat, and a long almost velvety stem. It does not appear whether this, like *T. caperata*, grows on wood.

T. SCABRA, Berk. and Curt. ;—albida ; pileo anguste flabellato-diviso furcato-lobato, granulato-scabro ; hymenio striato.—Ad terram ? Feejee Islands.

Pileus $1\frac{1}{4}$ in. high, main divisions much attenuated below, dilated above and incised, with the lobes incised or furcate, rough with little granular warts. Hymenium smooth, striate.—Closely allied to *T. pallida*, Schwein., but distinguished by its rough pileus, which may, however, prove to be an inconstant character.

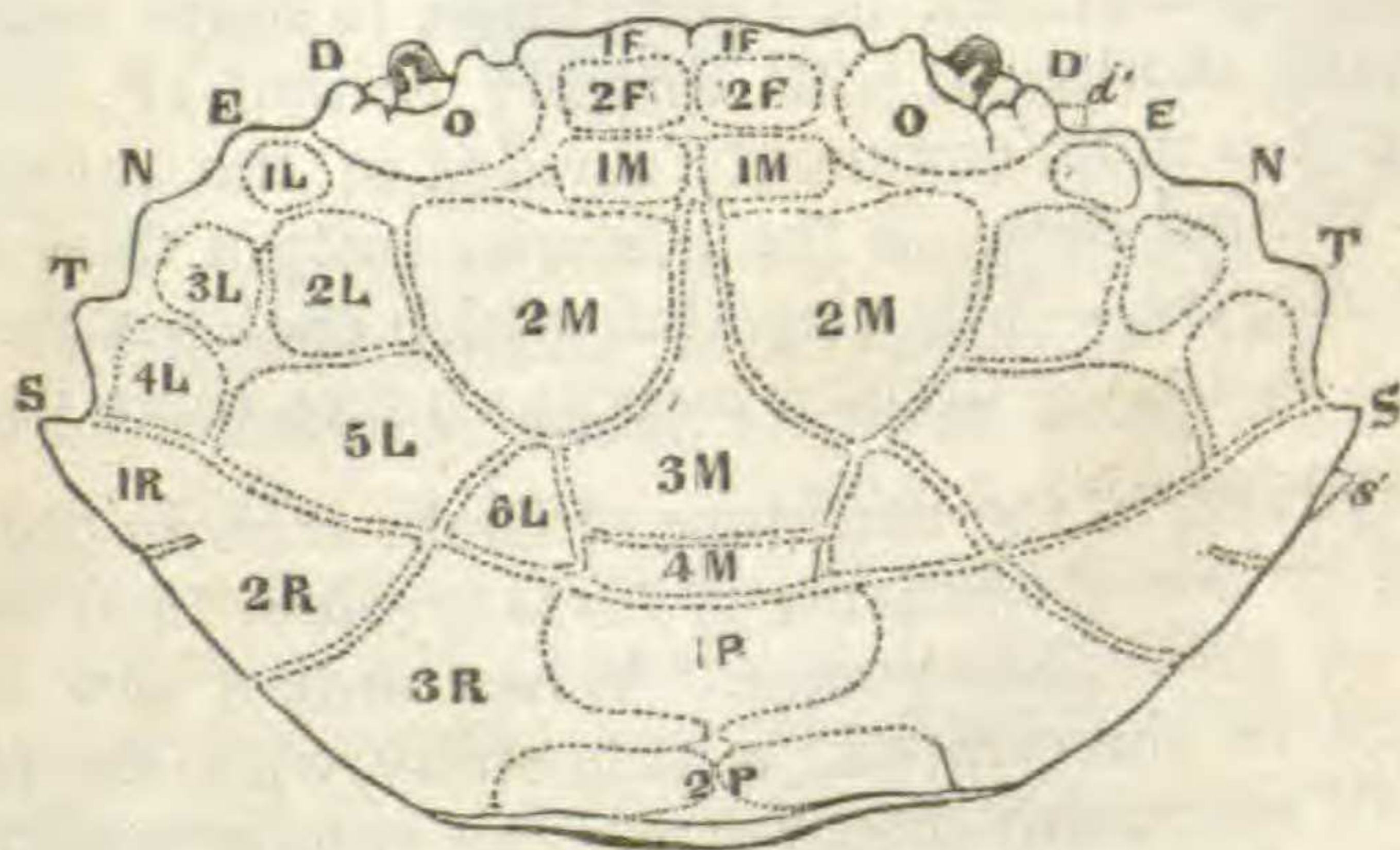
HYPOXYLON PILÆFORME, Berk. and Curt.;—globosum, stipitatum et sessile, piceo-laccatum ostiolis prominulis exasperatum, intus album.—Ad lignum. Oahu.

There are but two specimens of this, one of which is depressoglobose, produced at base into a short rugged stem nearly as long as the head, the whole $\frac{3}{4}$ of an inch high; the other sessile, or with a mere rudiment of a stem, and deformed as if by the partial confluence of two or three heads, thus somewhat resembling a small undulate form of *S. concentrica*.—The species is closely allied to *H. polymorphum*, but the sporidia are shorter and thicker. It resembles also *S. obovata*, Berk., and *S. poculiformis*, Mont.

ART. XII.—On the markings of the Carapax of Crabs; by
JAMES D. DANA.

THE areas into which the surface of the carapax of Crabs is subdivided were imperfectly distinguished and named by Desmarest. This author designated the regions according to the internal parts which they covered. But there is a system in the markings which this mode of indicating does not express, and moreover there is a uniformity of character and number which it fails to exhibit. Had the uniformity of number, position and outline been generally recognized, the drawings in this department of Crustacea would not be so commonly incorrect; for even figures from high authority usually misrepresent the character of the surface, and few can be pointed to that are faithful sketches. Moreover these regions, correctly understood, indicate certain homologies in the skeleton of the Decapods. We propose at this time simply to describe the surface markings as they appear.

1.



The above figure (fig. 1,) shows the normal number and position as observed in species of the Cancer group. A depression crosses the carapax just back of the middle, and terminates anterior to the last of the normal lateral teeth. Another depression begins in this line either side of the middle and extends